

REMARKS/ARGUMENTS

Claims 1, 4-12, and 15-20 are pending in the present application. Claims 2, 3, 13, and 14 were canceled; and claims 1, 4, 12, and 15 were amended. Reconsideration of the claims is respectfully requested.

I. Examiner Interview

Applicants thank Examiner Neway for the courtesies extended to Applicants' representative during the April 22, 2008 telephone interview. During the interview, Examiner Neway suggested amendments that would overcome the 35 U.S.C. § 103 rejection. Specifically, Examiner Neway suggested rewriting claim 3 in independent form with all of the limitations of the preceding base claims in order to overcome the 35 U.S.C. § 103 rejection and place the claims in condition for allowance. Examiner Neway also indicated that a CRF 1.132 declaration by the inventors of the present invention, stating that the *Luo* reference is the work of both inventors, would disqualify the *Luo* reference as prior art. The substance of the interview is summarized in the remarks of sections that follow.

II. 35 U.S.C. § 103, Obviousness

The Examiner has rejected claims 3-4 and 14-15 under 35 U.S.C. § 103 as being unpatentable over Xue et al ("Building a Large-Scale Annotated Chinese Corpus", Proceedings of the 19th International Conference on Computational Linguistics, 2002), (hereinafter "*Xue*") in view of Luo ("A Maximum Entropy Chinese-Based Parser," Proceedings of the 2003 Conference on Empirical Methods in Natural Language Processing, July 2003, pp 192-199), (hereinafter "*Luo*"). This rejection is respectfully traversed.

Claim 1 has been rewritten to incorporate the limitations of claims 2 and 3. In rejecting claim 3, as originally filed, the Examiner states:

Xue discloses the method of claim 2, but does not explicitly disclose assigning tags based on word tags as claimed. Luo discloses converting a corpus of word-based parse trees into a corpus of character based parse trees wherein converting the corpus of word based parse trees includes assigning a word position tag to each character in the character-based parse tree based on the word tag for each word in the word-based parse tree (Section 2, col. 2, lines 14-17).

Final Office Action dated February 22, 2008, page 5.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed.

Cir. 1992). The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In determining obviousness, the scope and content of the prior art are... determined; differences between the prior art and the claims at issue are... ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or non-obviousness of the subject matter is determined. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. *KSR Int'l. Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007). Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006)).

Claim 1, as amended, recites:

1. A method, in a data processing system, for parsing Eastern Asian language character streams, the method comprising:
 - receiving a corpus of word-based parse trees, wherein each word-based parse tree in the corpus of word-based parse trees includes a word tag for each word in the word-based parse tree;
 - converting the corpus of word-based parse trees into a corpus of character-based parse trees, wherein converting the corpus of word based parse trees includes assigning a word position tag to each character in the character-based parse tree based on the word tag for each word in the word-based parse tree; and
 - training a character-based parser using the corpus of character-based parse trees, wherein the character-based parser is used at a character level, and wherein the character-based parser does not require a separate word-segmenter.

Xue teaches word-based annotation relying on the accuracy of word-based segmentation. *Xue* discloses creating an annotated corpus of Chinese words, which are then parsed at a word level. The word-based parser of *Xue* requires a separate word segmenter. However, *Xue* does not teach converting word-based parse trees into character-based parse trees, as is claimed in claim 1. Furthermore, as noted by the Examiner in the portion of the Final Office Action reproduced above, *Xue* does not explicitly disclose assigning tags based on word tags as claimed in the present invention.

Luo does not constitute prior art under 35 U.S.C. § 103 because the named inventors on the present invention are the authors of the *Luo* reference. This fact has been attested to under CFR 1.132 by declaration, submitted with this response. Therefore, the rejection of claim 1 has been overcome.

III. Conclusion

It is respectfully urged that the subject application is patentable over the cited art and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: May 5, 2008

Respectfully submitted,

/Mari A. Stewart/

Mari A. Stewart
Reg. No. 50,359
Yee & Associates, P.C.
P.O. Box 802333
Dallas, TX 75380
(972) 385-8777
Attorney for Applicants

MAS/sbf